

King County Benchmarks

2006

Transportation

Highlights

Transportation Key to Regional Growth

The central Puget Sound region is a growing and vibrant community, but with that growth come challenges, key among them transportation. The 2006 Transportation Bulletin highlights the changes in King County's transportation system as well as actions being taken to accommodate the region's growth.

Following the national trend, commute times in King County have increased over the last two decades, though the average commute time in King County has remained under 30 minutes. According to the Washington State Department of Transportation (WSDOT), several King County commutes have seen increases in commuting time over the last three years--SR 520 between Bellevue and Seattle, SR 520 between Redmond and Seattle and I-405 between Tukwila and Bellevue. However, following highway improvements on SR 167, the work commute between Renton and Auburn has improved since 2002.

Several factors contribute to increasing commute times in King County. Commercial traffic has grown over the last decade, employment has rebounded since the recession from 2001 to 2003, and a large proportion of workers continue to commute alone. Combined, these factors create additional economic and environmental costs as goods, services, and people are unable to move efficiently through our region.

Responding to growth in activity at the Port of Seattle, commercial traffic has grown faster than automobile traffic in the last 10 years. While a rise in commercial traffic suggests economic growth in the region, it also adds stress to an already congested highway system.

Economic recovery has also brought growth in King County's population and workforce. Following a net job loss from 2000 to 2003, employment is again increasing and more workers are commuting on our highways. As the percent of workers who commute by single occupancy vehicle has not changed appreciably, our roads remain congested and commute times are slow to improve.

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King County Photo Archives

According to WSDOT, statewide congestion—more prevalent in the Central Puget Sound's urban areas—is estimated to be over 365,000 hours per weekday and represents about \$1.6 billion annually in lost time. Facing increasing demands on our transportation infrastructure, local and state governments recognize the need for regional and long-term transportation investments in all modes.

Responding to these challenges, efforts are underway to accommodate growth and improve King County's transportation system. Over the last five years, the number of workers commuting by public transit has increased. Land use and transportation planning collaborate to prioritize dense, pedestrian and bike-friendly communities. Transit providers continue looking for ways to provide increasingly reliable, convenient and frequent service. State and local authorities focus on the maintenance and improvement of the physical infrastructure. Through these and other efforts, local and state governments are addressing the transportation challenges of our vibrant and growing community.



King County Photo Archives

Indicator Flags

- There has been a long-term trend in a positive direction, or most recent data shows a marked improvement
- There has been little significant movement in this Indicator, or the trend has been mixed
- There has been a long-term negative trend, or the most recent data shows a significant downturn
- There is insufficient reliable trend data for this Indicator

Outcome: Encourage linkages between residences, commercial centers and workplace locations



Indicator 41: Average Commute Lengths for Major Destinations in King County

Countywide Planning Policy Rationale

"Within the Urban Growth Area, growth should be directed as follows: a) first, to Centers and urbanized areas with existing infrastructure capacity; b) second, to areas which are already urbanized such that infrastructure improvements can be easily extended; and c) last, to areas requiring major infrastructure improvements." (LU-28)

"The region's scarce resources for transportation capacity improvements must be used prudently to focus on areas where zoning and densities support a multi-modal transportation system....The land use pattern shall be supported by a balanced transportation system which provides for a variety of mobility options." (FW-18)

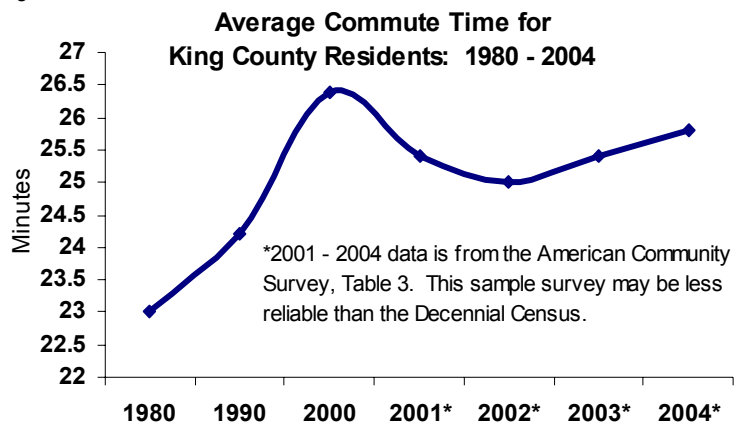
"Target ranges for employment growth inside and outside Urban Areas shall be based on the following criteria:...The willingness of local jurisdictions to implement policies which encourage transit...and the adoption of policies that encourage clustering of commercial and residential areas." (LU-68)

"Each [Urban] Center shall have planned land uses to accommodate...a minimum of 15,000 jobs within one half mile of a transit center."

Key Trends

- From 1990 to 2000 commute times in King County rose from 24.2 minutes to 26.5 minutes, an increase of about 9.5%. After dipping in 2001 and 2002, commute times began to climb again in 2003.
- There are several possible reasons for the dip in average commute length from 2000 to 2002 including infrastructure im-

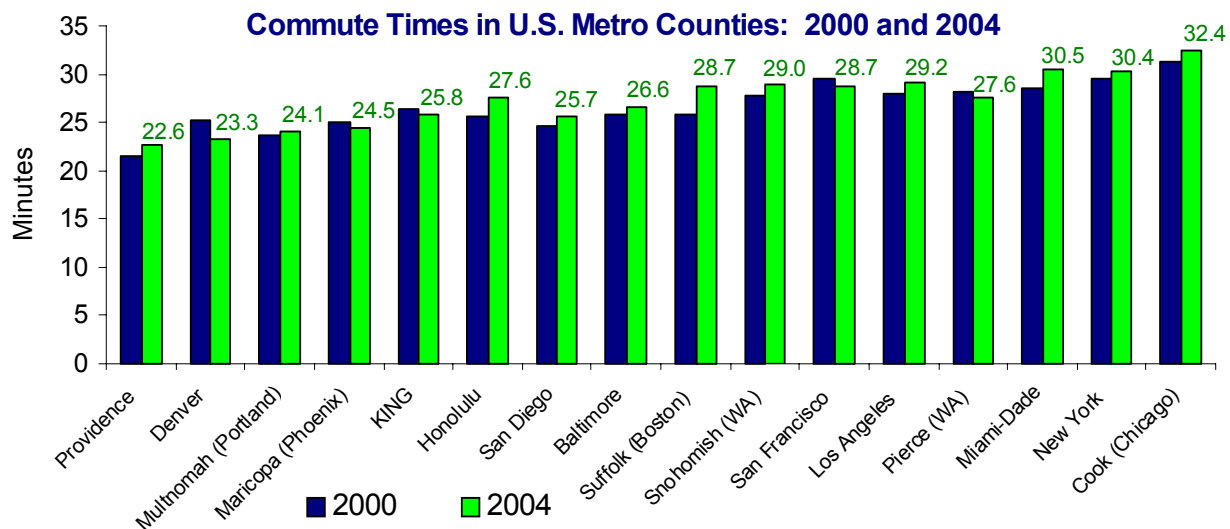
Fig. 41.1



provements and the possibility that people were working from home or choosing to live closer to their place of work. The most likely explanation is that fewer workers and fewer commercial vehicles were on the road during the recession from 2001 to 2003. The increase in commute times in 2003 and 2004 support this explanation as employment began to rebound.

- According to the Census Bureau's American Community Survey (ACS) King County's average commute trip time in 2004 was 25.8 minutes, up slightly from the 25.4 minutes reported in 2003. This trip time includes all forms of commuting.
- Of the 236 counties surveyed by ACS, King County had the 89th longest commute time in 2004. Queens County in New York had the longest commute time of 41.2 minutes. Lubbock County, Texas had the shortest commute time of 15.9 minutes.
- King County's commute time is relatively low among major metropolitan counties. As shown in figure 41.2, eleven comparable metropolitan counties—including Snohomish County, WA-- experienced increases in commute times from 2000 to 2004. Commutes in

Fig. 41.2



Indicator 41, continued

King and Pierce Counties declined during that time period.

- At 24.5 minutes, the city of Seattle's commute time was essentially the same as the national average of 24.7

minutes. The average commute in New York City was 38.4 minutes while Tulsa's commute averaged only 16.9 minutes.

- 2000 Census data showed an average commute time of 30.4 minutes for all those who *work in King County*. This includes King County workers who commute from surrounding counties. This travel time was about 2 to 3 minutes longer than in 1990.

Fig. 41.3

Major Destination and Return Commute Trip	Change in Commute Time from 2002 - 2004 (in Minutes of Travel)		
	AM Peak	PM Peak	Combined Round Trip Commute
Tukwila / Bellevue Roundtrip I-405	4	2	6
Everett / Seattle Roundtrip I-5	4	1	5
Redmond / Seattle Roundtrip SR-520	1	4	5
Bellevue / Seattle Roundtrip SR 520	2	2	4
Bellevue / Seattle Roundtrip I-90	0	1	1
Issaquah / Bellevue Roundtrip I-90	1	0	1
Redmond / Bellevue Roundtrip SR 520/I-405	0	1	1
SeaTac / Seattle Roundtrip I-5	2	-1	1
Issaquah / Seattle Roundtrip I-5/I-90	0	0	0
Auburn / Renton Roundtrip SR-167	2	-3	-1

- The Washington State Department of Transportation (WSDOT) measures peak-hour commute times on major King County routes. Fig 41.3 shows the change in minutes of travel on these routes from 2002 to 2004.
- Eight of the 10 round-trip routes experienced increases in overall commute times, one decreased, and one remained unchanged from 2002 to 2004. No morning commutes improved during this time period while only two evening commutes improved.
- The Tukwila to Bellevue I-405 morning commute experienced the greatest increase in travel time per mile from 2002 to 2004. Combined with the evening commute, the Tukwila to Bellevue round-trip commute grew from 58 minutes in 2002 to 64 minutes in 2004.
- The Renton to Auburn, SR 167 afternoon commute fell by three minutes to 17 minutes in 2004. WSDOT attributes this improvement to a restripe project north of the SR 18 interchange that eliminated a bottleneck and improved traffic flow around the interchange.
- According to the WSDOT less than half of the existing freeway capacity in the Central Puget Sound is effectively used during periods of heaviest congestion. When vehicles are delayed by congestion, freeways serve fewer people, resulting in infrastructure inefficiencies and economic costs to our region.

Outcome: Increase the Use of Modes of Transportation other than Single Occupancy Vehicles

Indicator 42: Public Transit Ridership



Countywide Planning Policy Rationale

"All jurisdictions in the County, in cooperation with METRO, the Metropolitan Planning Organization [Puget Sound Regional Council], and the State, shall develop a balanced transportation system...(FW-19)

"The countywide transportation system ...shall be a multi-modal system....[which] shall include the following: a. an aggressive transit system, including high-capacity transit; b. high occupancy vehicle facilities;...g. non-motorized facilities; and h. freeways, highways, and arterials." (T-1)

"Each Urban Center will be providing for a minimum of 15,000 jobs and should be served by high-capacity transit.... All jurisdictions that would be served by high-capacity transit shall plan for needed high-capacity transit rights-of-way, stations and station supportive transportation facilities and land uses in their comprehensive plans.... (T-5)

"To encourage transit use, jurisdictions should establish mechanisms to limit the use of single-occupancy vehicles for commuting purposes...All plans for Urban Centers shall encourage bicycle travel and pedestrian movement." (LU 44)

"Mode-split goals and measures of mobility for transit, ridesharing and non-motorized travel shall be established by local jurisdictions and METRO."

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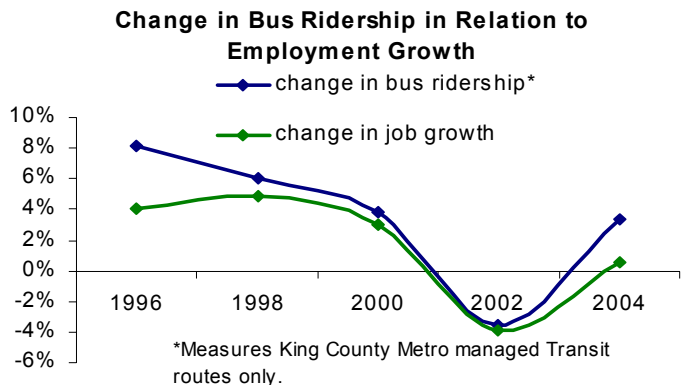
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Key Trends

Transit Ridership

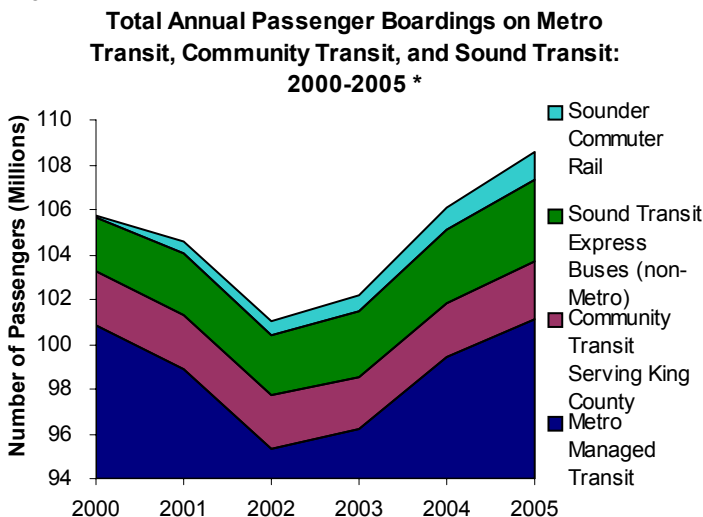
- Bus ridership appears to be closely related to economic cycles, as illustrated in Fig. 42.1. Bus ridership decreased as employment in King County remained low in 2001 and 2002. As employment rebounded after the recession, job growth led to more riders on public transportation.

Fig. 42.1



- With almost 109 million passenger boardings in 2005, public transit services in King County have surpassed their 2000 level.
- While King County Metro has consistently accounted for the majority of passenger boardings in King County, the proportion of passengers on non-Metro managed transit services has grown from 5% in 2000 to 7% in 2005. Overall, transit ridership has grown by about 3% since 2000.

Fig. 42.2



* See "Indicator 42: Metro Transit Ridership" on page 12 for explanation of transit categories.

- King County Metro added over 1.7 million passenger boardings from 2004 to 2005. Community Transit and Sound Transit combined to add close to an additional 500,000 bus boardings.
- Sounder Commuter Rail saw rapid growth from 2000 to 2005. The Sounder began carrying commuters between

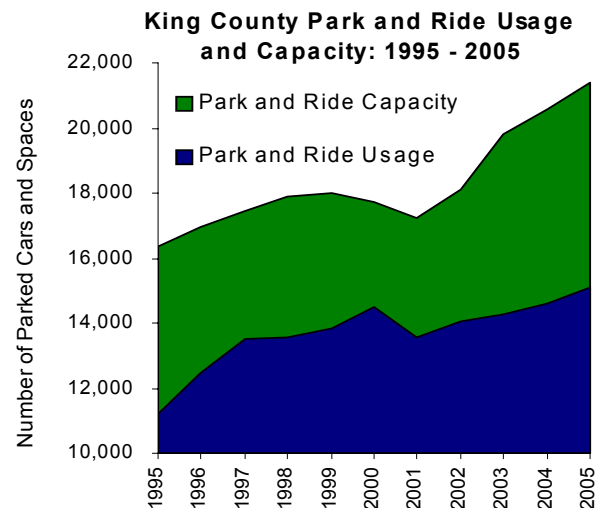
Tacoma and Seattle in September 2000 and ridership grew by nearly 500% the following year. Passenger boardings on Sounder Commuter Rail have grown annually by over 25% since service between Everett and Seattle began in December 2003.

- Sound Transit also experienced substantial growth from 2000 to 2005 with boardings on Sound Transit Express Buses increasing by over 50% in that time period.

Park and Ride Capacity

- Since 1995, there has been a 31% increase in park and ride capacity and a 34% increase in usage. This corresponds to an increase of 5,000 spaces and close to an additional 4,000 cars using park-and-ride lots in the last decade.

Fig. 42.3



- In the fourth quarter of 2005, King County had over 21,000 parking spaces in 124 park-and-ride lots, with an average of 15,000 spaces used daily. This amounts to a 71% usage rate, only slightly smaller than last year.
- Daily park-and-ride use rose by 492 vehicles in the fourth quarter of 2005 over the previous year, an increase of 3.4%. Total parking capacity expanded by 830 spaces during 2005.
- Of the 124 park-and-ride lots, 42 experienced 80% or higher utilization rates for the fourth quarter of 2005. 21 of those lots were filled to 100% capacity or above.
- With over 9,500 spaces, south King County park-and-rides have more capacity than either the Eastside or north King County. 64% of the south County lot spaces were utilized in the fourth quarter of 2005. North King County had 85% usage of its 3,700 spaces and the Eastside had 74% usage of its 8,100 spaces.

What We Are Doing

- Planning for a new Transit Center in Burien's downtown to be completed by the end of 2006.
- Issaquah Highlands Park-and-Ride garage, Sound Transit's South Sammamish Park-and-Ride Lot and the Federal Way Transit Center parking garage opened in the first quarter of 2006, adding 2465 new parking spaces to the Park-and-Ride system.
- Increasing service and ridership on Sounder commuter rail, particularly on the recently-opened Everett-Edmonds-Seattle line.
- Seven transportation agencies are collaborating to establish the Smart Card Project which will allow customers to use one fare card on multiple systems throughout the four county Central Puget Sound area.
- Fare collection technology will allow passengers to link trips between transit, ferries and rail.
- Improving transit performance and reliability through better service design and shorter public transport routes and by reducing number of stops on select bus routes.
- Pursuing Transit-Oriented Development (TOD) projects in higher-density, mixed-use urban areas throughout King County to encourage public transportation ridership. Projects are underway in Auburn, Burien, Kent, Northgate, and Redmond.
- Proceeding with the first-phase construction of the Sound Transit Light Rail System, and continuing to plan for a comprehensive system linking Sea-Tac Airport, downtown Seattle, the U.W., and eventually Northgate.

Outcome: Increase the Availability and Use of Modes of Transportation other than Single Occupancy Vehicles

Indicator 43: Percent of Residents who Walk, Use Transit, Bicycle, or Carpool as Alternatives to the Single Occupancy Vehicle



Countywide Planning Policy Rationale

"The land use pattern shall be supported by a balanced transportation system which provides for a variety of mobility options...[including] a high capacity transit system which links the Urban Centers and is supported by an extensive high-occupancy vehicle system, a local community transit system for circulation within the Centers and to the non-center Urban Areas, and non-motorized travel options." (FW-18)

"To encourage transit use, jurisdictions should establish mechanisms to limit the use of single-occupancy vehicles for commuting purposes. Such mechanisms could include charging for long-term single-occupancy vehicle parking and/or limiting the number of off-street parking spaces for each urban Center...[and] developing coordinated plans that incorporate Commuter Trip Reduction guidelines." (LU-44)

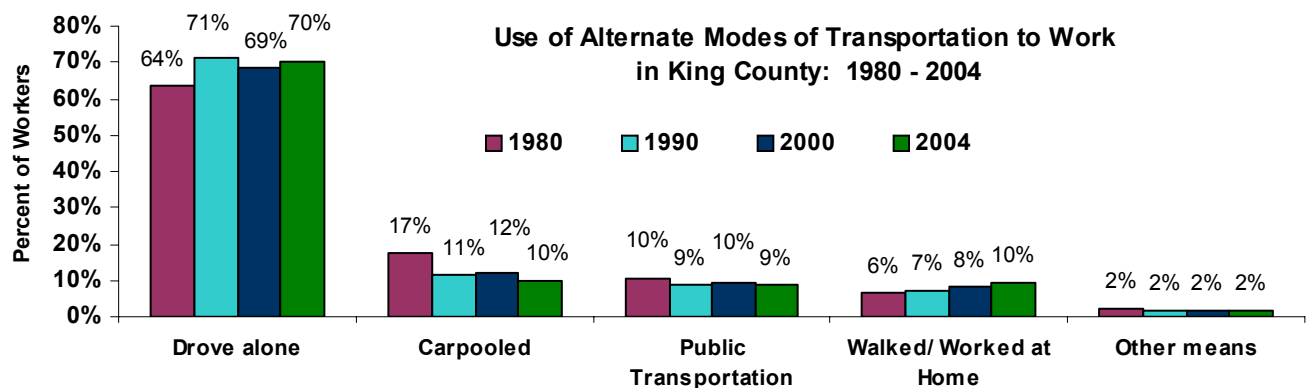
"The transportation element of Comprehensive Plans shall include pedestrian and bicycle travel as part of the transportation system and be developed on a coordinated, regional basis. The bicycle and pedestrian element shall be a part of the funding component of the capital improvement program." (T-7)

"Mode-split goals and measures of mobility for transit, ridesharing and non-motorized travel shall be established by local jurisdictions and METRO."

Key Trends

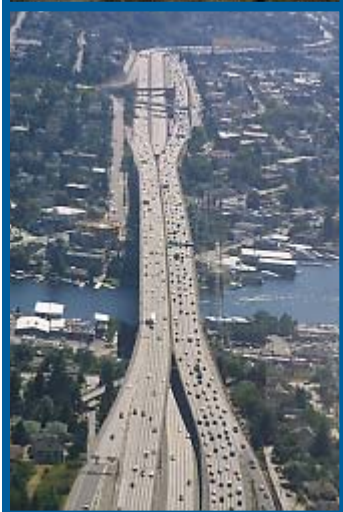
- The proportion of people who work at home or walk to work has increased steadily from 6% in 1980 to 10% in 2004. This trend may be due to changes in information and communication technologies, which have allowed more people to work flexible hours or work from home.
- Carpooling decreased during the 1980's, but has remained stable at about 11% since 1990.

Fig. 43.1



(continued on page 8)

Transportation By The Numbers



King County Total Land Area.....	2,134 square miles
Unincorporated King County Area.....	1,755 square miles
King County Population (2005).....	1,808,300
Unincorporated King County Population (2005).....	364,498

Total Lane Miles of Road in King County.....	7,938
Total Lane Miles of Road in Unincorporated King County.....	1,804
King County DOT Roads Capital Improvement Prg. Budget (2006).....	\$46,517,000

Transit Services

Passenger Boardings (2005)

Metro Managed Transit.....	101,155,054
Community Transit Serving King County.....	2,538,841
Sound Transit Express Buses.....	3,648,327
Sounder Commuter Rail.....	1,267,973

Fleet and Park-and-Ride Capacity (2005)

Number of King County Metro Coaches.....	1,508
Number of Sound Transit Coaches.....	228
Number of Community Transit Coaches.....	259
Number of Park-and-Ride Lots.....	124
Number of Park-and-Ride Spaces.....	21,381
Average Park-and-Ride Spaces Utilized(4 th Qtr 2005).....	15,089

King County International Airport

Total Takeoffs and Landings (2005).....	300,478
Based Aircraft.....	497

Seatac International Airport

Total Air Passengers.....	29,289,026
Metric Tons of International Air Cargo Activity.....	338,591

Maritime Port of Seattle

Total Vessel Calls (1996).....	1,150
Total Vessel Calls (2005).....	1,345
Total Container Volume (1996).....	1,473,561
Total Container Volume (2005).....	2,087,929

Vehicle Travel

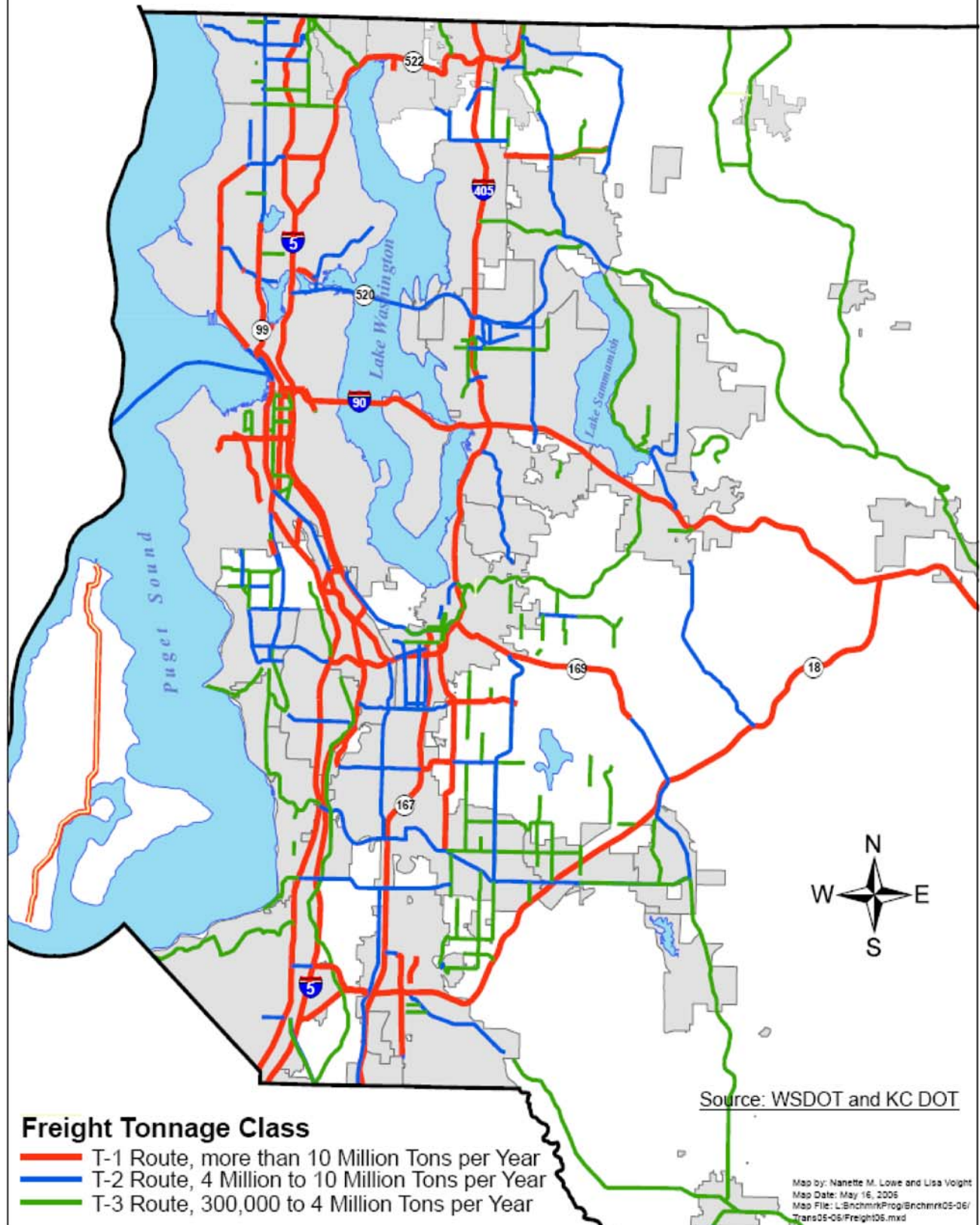
Vehicle Miles Traveled (2003).....	16,191,818,000
Vehicle Miles Traveled per Capita (2003).....	9,124
Number of Licensed Vehicles in King County (2004).....	1,733,410
Number of Licensed Vehicles per Capita in King County (2004).....	.958

Ferry Statistics 4th quarter 2005

Total number of vehicles transported.....	446,854
Total number of vehicle passengers transported.....	211,792
Total number of foot passengers transported.....	129,209

Photos available at
<http://kcweb.metrokc.gov/photos>.
 King County Photo Archives

Freight and Goods Transportation Systems Map: 2005



(continued from page 5)

- In 2004, 70% of King County residents drove alone to work. This is down slightly from 71% in 1990, but higher than the 64% who commuted alone in 1980. It is noteworthy that the percentage of residents using carpools during this same period has decreased from 17% to 10% of all residents.
- According to the American Community Survey, the proportion of commuters who utilize public transportation (buses, ferries, and taxis) has remained roughly constant since 1980 at 10%.
- Reducing Single Occupancy Vehicle (SOV) trips is critical for air quality, energy consumption, greenhouse gas emissions, and improved mobility. Despite this, progress in reducing SOV trips appears to be slow.

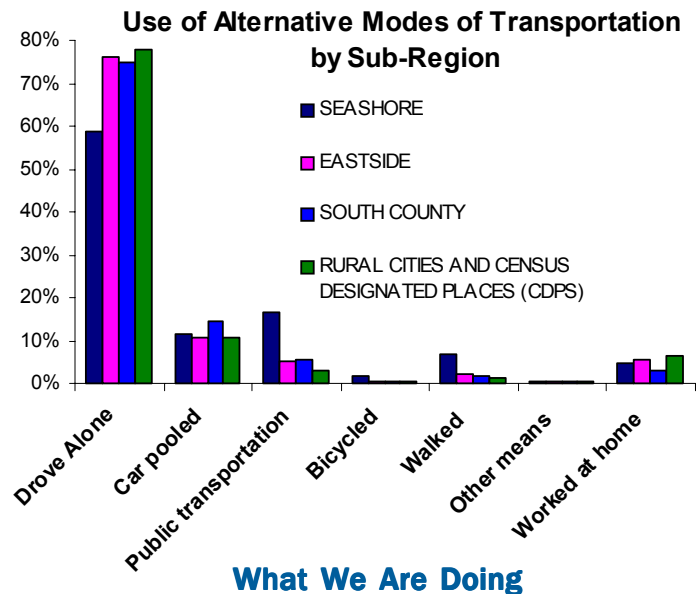


Bus from Vashon Island carrying passengers onto the ferry and into downtown Seattle. King County Photo Archives.

- In the densely-populated SeaShore sub-area (Seattle, Shoreline, and Lake Forest Park), commuters are much more likely to use alternatives to SOVs. According to the 2000 Census, while 58.5% still drove alone, nearly 17% used public transportation, 11.5% used carpools, and 7% walked. Another 4.5% worked at home, and almost 2% bicycled.
- In the more sparsely-populated rural areas, 78% drove alone to work, and about 10% carpooled. 6.2% worked at home, and another 1.4% walked to work. With fewer transit opportunities in the rural areas, only 3.1% used public transportation to get to work.
- The Eastside and South County had similar mode splits, with two notable exceptions. South County at 14.3%, has the highest rate of carpooling of any of the sub-areas, and the lowest rate of working at home. 5.4% of workers from the Eastside, on the other hand, worked at home, compared to just 3.1% in the South sub-area.

- While 8.3% of the workforce in SeaShore walked or biked to work, less than 2.5% did so in any of the other sub-regions.
- These travel-to-work preferences seem to reflect the greater availability of public transportation in SeaShore. They may also reflect the availability of sidewalks and trails that encourage walking and biking, and the closer proximity of homes to workplaces.
- In 2002, about 50% of non-work trips in King County were by SOV, while 37% were by carpool. Over 9% were on foot, bicycle or other, and just 4% were by public transportation.

Fig. 43.2



- Encouraging environmental protections under King County Executive Sims' Global Warming Initiative, which includes the use of biodiesel buses, energy-efficient hybrid buses and fleet vehicles, the inclusion of habitat mitigation efforts in large capital projects, and strategic land use planning to encourage carpool, vanpool, and bus ridership.
- Adding routes to serve established urban clusters where public transportation use is projected to be high. Also encouraging the design and building of pedestrian-friendly places in suburban areas, and facilitating mixed use development, where jobs, shopping, and housing are adjacent.
- Coordinating jurisdictional agencies to better define and reach the goals of a Bus Rapid Transit System (BRT)-- higher capacity and faster operation than traditional bus routes-- in selected areas.
- Regional transit services are participating in and promoting alternatives to single occupancy vehicle commutes. Programs such as Flexcar, car and vanpools, and custom bus service provide a variety of commuting alternatives. The extension of bicycle paths and addition of bike racks on buses, implementation of WIFI access on commute busses, and transit stop improvements increase the convenience of public transportation for commuters.

Outcome: Improve Ability of Goods and Services to Move Efficiently and Cost-Effectively Through the Region

Indicator 44: Amount of Congestion Affecting Commercial and non-Commercial Traffic

Countywide Planning Policy Rationale

"In recognition of the fact that King County is a regional freight distribution hub and a major international trade gateway, and that freight transportation is one of the state's most important basic sector economic activities, goods mobility by all modes shall be included as a component of comprehensive plans." (FW-20) "In order to maintain regional mobility, a balanced multi-modal transportation system shall be planned that includes freeway, highway and arterial improvements by making existing roads more efficient. These improvements should help alleviate existing traffic congestion problems, enhance high-occupancy vehicle and transit operations, and provide access to new desired growth areas....General capacity improvements promoting only single-occupant vehicle traffic shall be a lower priority." (T-8)

Congestion: Volume/Capacity (V/C) Ratios

- Commute times on major routes, as shown in Indicator 41, are considered a better measure of traffic improvement or deterioration than V/C ratios, and are now the preferred benchmark of the WSDOT. However, as another measure, figs. 44:1-3 show the amount of traffic volume in relation to capacity on three of the most heavily traveled routes in King County.
- Of the 12 commute trips shown here, nine have traffic speeds at or near free flow, though maneuverability on the roadways is noticeably restricted.
- Of those routes sampled by WSDOT, I-5 near the King-Snohomish County line is the most congested route during both the morning southbound commute and the evening northbound commute. Congestion on the morning southbound route has improved slightly since 1995 but is still overly congested with a V/C ratio of .92. The evening northbound commute is now the most congested route, with virtually no usable gaps in the traffic stream and extremely limited maneuverability.
- Congestion on all SR 522 commutes has increased since 1999. The morning westbound commute and the evening eastbound commute are the most congested with V/C ratios of .77 and .66 respectively.
- While congestion for SR18 westbound traffic has worsened, considerable improvements have occurred for eastbound traffic. This may be attributed to several interchange and roadway widening projects in the mid to late- 1990's.

Commercial (Truck) Traffic

- Truck traffic has been increasing faster than car traffic on major King County highways. Truck traffic now accounts for 7.3% of all vehicles on the five King County highways sampled. This is a notable increase from 1994/1995 when truck traffic accounted for 5.3% of all highway traffic.
- The growth in commercial truck traffic can be attributed to increased trade activity. Since 1996, the Port of Seattle has seen a 42% increase in container volume moving through the

Fig. 44.1

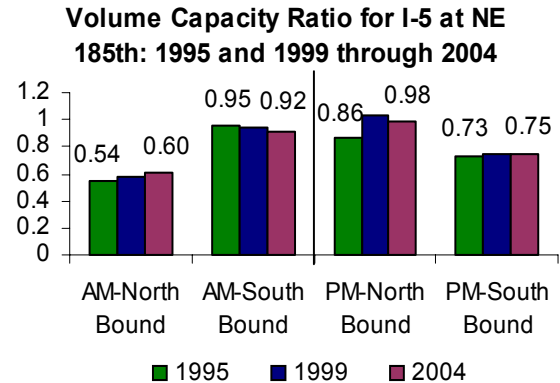


Fig. 44.2

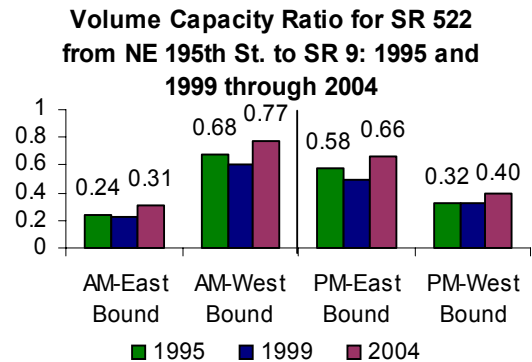
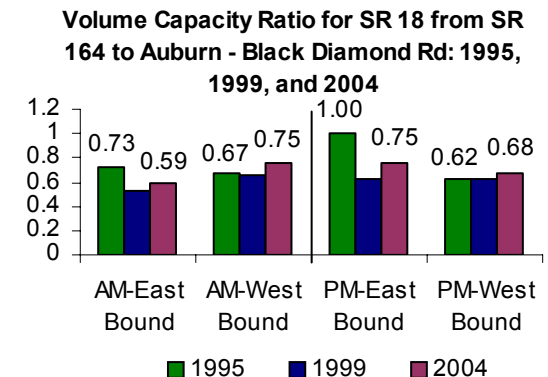


Fig. 44.3



Key to Volume / Capacity Ratios (V/C)

- .5 - .75 Travel speed still at or near free flow, but ability to maneuver within the traffic stream is noticeably restricted.
- .75 - .90 Travel speeds begin to decline with increasing flows; minor incidents expected to cause queuing.
- .90 - 1.0 Operation at or near capacity and therefore volatile because there are virtually no usable gaps in the traffic stream; maneuverability is extremely limited.

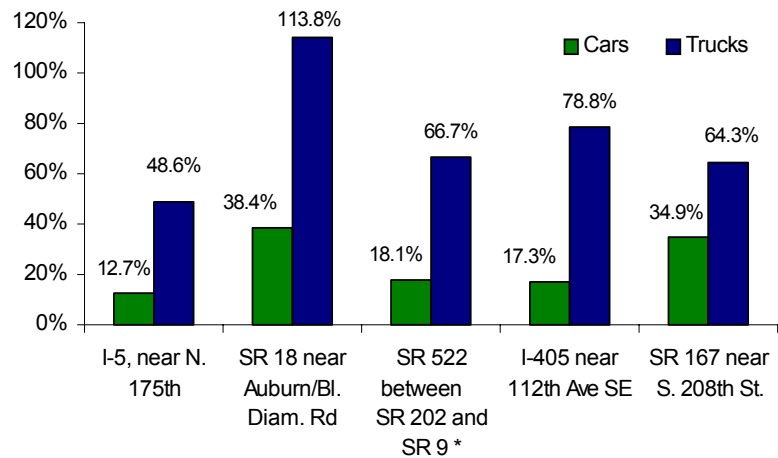
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seaport. In addition to rail transport, truck traffic will continue to grow in order to accommodate trade activity at the port.

- The Washington State Freight and Goods Transportation System (FGTS) classifies state highways, county roads and city streets according to the average gross truck tonnage they carry. Strategic Freight Corridors are those routes that carry over four million gross tons of freight annually. The map on page 7 identifies those high capacity roads in King County.
- According to FGTS, over 121 million tons of freight moved through King County via I-5 in 2005.
- Commercial traffic mobility, as well as traveler convenience, is affected by high levels of traffic congestion. Delays impose costs due to lost time for commuters and commercial transporters. They also involve higher vehicle costs because of excess fuel usage, and wear and tear on vehicles from stop-and-go traffic. The latter have environmental impacts as well.

Fig. 44.5

Percent Increase in Annual Average Daily Traffic by Cars vs. Trucks (1994 - 2004)

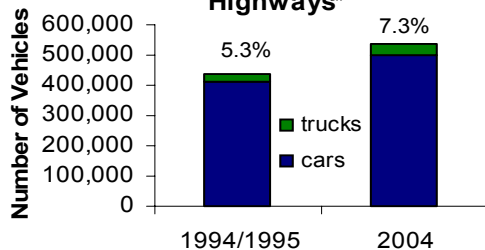


*SR 522 based on 1995 data. All other routes based on 1994 data.

- SR 522 has also seen substantial growth in truck traffic in the last decade. Trucks accounted for over 2% of vehicle traffic in 1995, but now account for almost 10% of that traffic.
- Of those highways sampled, I-5 has seen the lowest percentage of growth, both in truck and automobile traffic, over the last decade. It is, however, the most utilized highway, supporting almost 190,000 vehicles per day in 2005. This equates to about 179,000 cars and 11,000 trucks per day.

Fig. 44.4

Trucks as Percent of All Vehicles on Five King County Highways*



*Aggregate of annual average daily traffic on I-5, SR 522, SR 167, and SR 18. SR 522 based on 1995 data. All other routes based on 1994 data.

- Increased truck traffic has been most noticeable on SR 18, which saw a 114% increase in truck traffic from 1994 to 2004. Commercial traffic now accounts for over 12% of the vehicle traffic on SR 18.
- Building an auxiliary lane on northbound I-5 from the NE 175th Street on-ramp to the exit-only lane for NE 205th Street to relieve congestion and improve safety by providing more room for motorists to speed up and merge when getting on and off the freeway.
- Performing a major rehabilitation/ replacement of the South Park Bridge crossing the Duwamish River west of Boeing Field.

What We Are Doing

King County Growth Management Planning Council Members

Chair
Ron Sims, King County Executive

Executive Committee

Richard Conlin, Councilmember, City of Seattle
Grant Degginger, Councilmember, City of Bellevue
Dow Constantine, Councilmember, King County
Jean Garber, Councilmember, City of Newcastle
Walt Canter, Commissioner, Cedar River Water and Sewer District

GMPC Members

Tim Clark, Councilmember, City of Kent
Bob Edwards, Commissioner, Port of Seattle
Eric Faison, Councilmember, City of Federal Way
Reagan Dunn, Councilmember, King County
Terri Briere, Councilmember, City of Renton
Lucy Krakowiak, Councilmember, City of Burien
Greg Nickels, Mayor, City of Seattle
Mark Cross, Councilmember, City of Sammamish
Robert Sternoff, Councilmember, City of Kirkland
John Chelminiak, Councilmember, City of Bothell

Patrick Ewing, Councilmember, City of Bothell
Nancy Backus, Councilmember, City of Auburn
Larry Gosset, Councilmember, King County
Larry Phillips, Councilmember, King County
John Resha, Councilmember, City of Redmond
Pete von Reichbauer, Councilmember, King County
Peter Steinbrueck, Councilmember, City of Seattle

Alternate Members

Marlene Ciraulo, Commissioner, KC Fire District #10;
David Della Councilmember, Seattle;
Phil Noble, Deputy Mayor, Bellevue

Outcome: Protect and Improve Transportation Infrastructure

Indicator 45: Number of Lane Miles of City, County, and State Roads and Bridges in Need of Repair and Preservation



Countywide Planning Policy Rationale

"Transportation elements of Comprehensive Plans shall reflect the preservation and maintenance of transportation facilities as a high priority to avoid costly replacements and to meet public safety objectives in a cost-effective manner." (T-16) "Infrastructure planning and financing shall be coordinated among jurisdictions to direct and prioritize Countywide facility improvements" (FW-21)

Fig. 45.1

Lane Miles of County and City Roads in Need of Overlay, Repavement or Reconstruction: 2006 -									
Jurisdiction	Total Lane Miles	Lane Miles In Need of Repave/ Rehab.	Percent of Total in Need of Repave / Rehab.	Lane Miles Currently Planned for Repave/ Rehab.	Percent of Need Being Met (by Lane Miles)	Funding Needed	Est. Cost per Lane Mile*	Funding Budgeted	Percent of Need Met (by Cost)
Uninc. King County	4284	259	6.0%	171	65.9%	\$ 16,499,656	\$ 63,792	\$ 11,422,225	69.2%
Auburn	400	344	86.2%	116	33.6%	\$ 36,900,000	\$ 107,130	\$ 3,590,000	9.7%
Burien	118	20	16.9%	16	80.0%	\$ 1,500,000	\$ 75,000	\$ 900,000	60.0%
Clyde Hill	34	2	6.2%	2	99.5%	\$ 650,000	\$ 309,524	\$ 680,000	104.6%
Kirkland	313	278	88.9%	39	14.0%	\$ 18,000,000	\$ 64,772	\$ 4,200,000	23.3%
Mercer Island	160	128	79.8%	124	97.3%	\$ 4,228,000	\$ 33,161	\$ 3,328,000	78.7%
Shoreline	361	351	97.2%	361	102.8%	\$ 4,240,340	\$ 12,094	\$ 4,240,340	100.0%
Renton	460	328	71.4%	24	7.2%	\$ 15,800,000	\$ 48,171	\$ 6,800,000	43.0%
SeaTac	184	50	27.3%	15	29.9%	\$ 1,400,000	\$ 27,950	\$ 1,466,000	104.7%
Seattle**	3946	680	17.2%	180	26.5%	\$ 328,200,000	\$ 482,647	\$ 37,100,000	11.3%
Total for 9 Cities and UKC	10,258	2,439	23.8%	1,046	43%	\$ 427,417,996	\$ 175,222	\$ 73,726,565	17.2%
*Per lane mile cost varies greatly between cities, for two reasons: 1) Cities with older streets that have not been maintained, will have the high costs associated with years of deferred maintenance or repair; and 2) cities differ in how much of overhead cost is reported as part of the repave/rehabilitation budget.									
** Repavement/ Rehabilitation data for Seattle is reported for arterial streets only (which account for one third of Seattle's street network). Seattle DOT has one significant non-arterial paving programs beyond chip seal/BST projects.									

Fig. 45.2

Summary of Lane Miles of County and City Roads in Need of Overlay, Repavement or Reconstruction									
Year	Number of Juris-dictions Reporting*	Total Lane Miles	Lane Miles In Need of Repave/ Rehab.	Percent of Total in Need of Repave / Rehab.	Lane Miles Currently Planned for Repave or Rehab.	Percent of Need Being Met (by Lane Miles)	Funding Needed	Funding Budgeted	Percent of Need Met (by Cost)
2004-2005	15	11,360	1,157	10.2%	375	32%	\$ 398,308,907	\$ 51,239,500	12.9%
2006-2007	9	10,258	2,439	23.8%	1,046	43%	\$ 427,417,996	\$ 73,726,565	17.2%
* Based on reports from Unincorporated King County and other cities as reported in 2005 and 2006.									

Key Trends

- Total lane miles in the reporting jurisdictions which are in need of repair has increased from 10% to 24%. However, it should be noted that the reporting jurisdictions vary from year to year.
- Despite the increase in the percentage of roads which are in need of repair, the relative percentage of the fulfillment of this need has increased from 32% to 43%.
- Though 43% of those roads in need of repair are slated for repavement or rehabilitation, current budgets will cover only about 17% of the projected costs of completing all necessary repairs.

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Repair of Tye River Bridge. KC Photo Archives.

- Seattle has the highest cost per lane mile for road repaving and repair and considerable need with 680 lane miles in need of repair or repaving. The 2006-2007 projected paving budget exceeds recent historical levels because several 2005 projects were deferred to 2006. Over the last nine years, the city has spent approximately \$7 million per year in paving.
- Seattle's routine repair program focuses on pothole repairs. With a deferred maintenance backlog of approximately \$300 million on arterial streets alone, maintenance is performed as funds are available and on streets where it can deliver the greatest area of improvement of the largest number of users.
- Excluding Seattle, close to 50% of the county's repavement/ rehabilitation needs by lane is expected to be met in 2006 and 2007 with nearly \$37 million in budgeted funding.

Data Sources

Indicator 41: Average Commute Lengths

Data Source: Decennial Census 1980, 1990, 2000. American Community Survey (ACS), 2004. Washington State Department of Transportation, Transportation Data Office. *Measures, Markers and Mileposts*, Sept. 2005. WS DOT.

Indicator 42: Metro Transit Ridership

Data Source: Metro Transit General Manager's Quarterly Report, Metro Transit Division. Sound Transit and Community Transit ridership reports. The Washington State Employment Security Department. Figure 42.2: Metro-Managed Transit includes metro buses and Sound Transit Express buses operated by Metro. Community Transit Routes are from Snohomish County to downtown

Seattle, Bellevue, and UW. Sound Transit Express Buses are routes to/ from Pierce to King County and to/from Snohomish to King County. Sounder Commuter Rail includes all passenger boardings on the Tacoma and Everett to Seattle routes and does not include Tacoma Light Rail Link. For Metro-Managed Transit, software improvements used to calculate ridership accounts for about 0.8% of the increase over previous years.

Indicator 43: Percent of Residents Who Use Alternatives to Single-Occupancy Vehicles

Data Source: Decennial Census of Population: Table DP-3. Profile of Selected Economic Characteristics: 2000, 1990 and 1980. American Community Survey, 2004; Puget Sound Transportation Panel Survey, 1999 and 2002, conducted by the Puget Sound Regional Council for non-work trips. On the panel survey, in order to assure an adequate number of transit-users for statistical significance, there is a slight bias in favor of transit-users. This means that the mode split in the panel survey is not exactly comparable to the mode split reported by the Census.

Indicator 44: Ability of Goods and Services to Move Efficiently

Data Source: Washington State Department of Transportation, Transportation Data Office. *Measures, Markers and Mileposts*, Sept. 2005. WS DOT. Project data at <http://www.wsdot.wa.gov/projects>. Also WS DOT *Freight and Goods Transportation System (FGTS) 2005 Update*.

Indicator 45: Number Lane Miles of City, County and State Roads and bridges in Need of Repair and Preservation

Data Source: King County DOT. Roads Division; Public Works Departments of King County Cities; WS DOT.

Transportation By The Numbers

Data Sources: KC OMB, 2005 KC Annual Growth Report; Puget Sound Regional Council; KC DOT; KC Metro Division, Sound Transit, and Community Transit reports; Port of Seattle, <http://www.portseattle.org>; KC OMB 2005 Environmental Bulletin; WA State Data Book 2005; WA State Ferries, <http://www.wsdot.wa.gov/ferries/>.



Traffic congestion ca. 1939-1940 on Spoke Street, Seattle. KC Photo Archives.

The **King County Countywide Planning Policies Benchmark Program** is a program of the Metropolitan King County Growth Management Planning Council. Reports on the 45 Benchmark Indicators are published annually by the King County Office of Budget. A companion to these reports is the **King County Annual Growth Report**. All reports are available on the Internet at <http://www.metrokc.gov/budget/benchmark>. For information about the **Benchmark Program**, please contact Lisa Voight, Program Manager (206) 296-3464, or e-mail: lisa.voight@metrokc.gov. The Benchmark Program address is King County Office of Budget, 701 Fifth Ave, Suite 3200, Seattle, WA 98104.

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